

# Gallstones and laparoscopic cholecystectomy



## Who is this leaflet for?

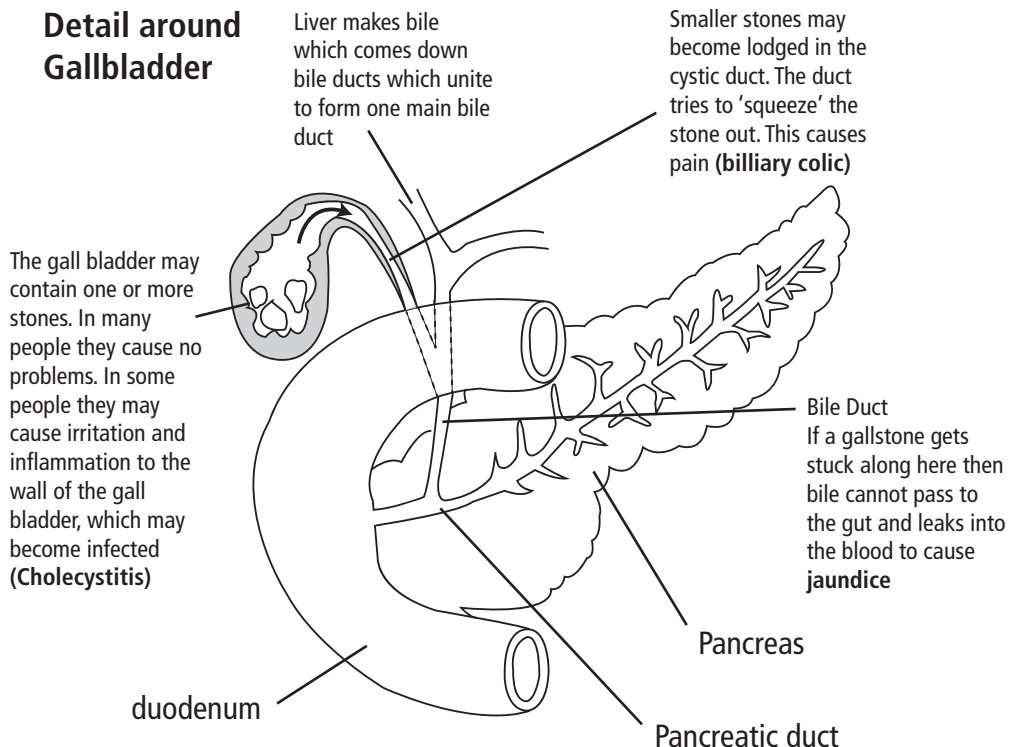
This leaflet is for people who have gallstones. It explains what your gall bladder does, what causes gallstones, and how they are treated. It provides advice about diet and explains what surgery involves, including any possible risks.

The information provided is intended as general guidance only. Individual care may vary depending on your consultant, and this should be explained to you.

## What is the gall bladder and what does it do?

Your gall bladder is a small pear sized organ that stores bile. Bile is used to digest fatty foods. It is produced by your liver and transported from your gall bladder to your bowel through a tube called your bile duct. Your gall bladder is not an essential organ. Following its removal you are still able to digest fatty foods.

### Detail around Gallbladder



## **What are gallstones?**

Gallstones occur when bile (which is normally fluid) crystallises to form stones. Gallstones commonly contain lumps of cholesterol-like (fatty) material that has solidified and hardened. Bile pigments or calcium deposits may form gallstones. The number of stones may vary, from just a few small stones to many. Occasionally, just one large stone is formed.

About 1 in 3 women, and 1 in 6 men, form gallstones at some stage in their life. Gallstones become more common with increasing age. The risk of forming gallstones increases with pregnancy, obesity, rapid weight loss, and if you take certain medicines such as the contraceptive pill.

## **Does diet cause gallstones?**

Not directly, but overweight people are more likely to develop gallstones. There is also some evidence to suggest that a diet which:

- is high in fibre
- is low in animal fat
- is vegetarian, or
- includes a moderate amount of alcohol

may reduce the risk of forming gallstones.

It is sensible to follow current healthy eating guidelines, which recommend that you:

- include fruit
- reduce your fat intake
- keep to your ideal weight.

## **Do I need to avoid certain foods?**

You may find that fried foods, pastries or fatty foods such as cream cause an attack of abdominal pain called biliary colic. If certain foods cause discomfort, it makes sense to avoid them. It is important to eat as wide a variety of foods as possible.

## What problems can gallstones cause?

Around 80% cause no problems at all. Most people with gallstones don't know they have them. Gallstones that have never caused problems may be seen if your abdomen is scanned or X-rayed. These tests may be done when looking for the cause of abdominal symptoms. If gallstones are found this does not always mean they are the cause of your symptoms.

## Possible problems

- **Biliary colic** – this is a severe pain in your upper abdomen, which can last up to one and a half hours. The pain is usually worse on your right-hand side, just below your ribs. It is usually caused by a stone that gets stuck in your cystic duct (the small tube that takes bile from your gall bladder to your bile duct). Your gall bladder then squeezes hard to dislodge the stone, and this causes pain.

Pain from biliary colic may last from a few minutes to several hours. A severe pain may happen rarely, or flare up with increasing frequency. Sometimes less severe but niggly pains occur, particularly after a fatty meal when your gallbladder contracts most.

- **Cholecystitis** – this is inflammation of your gall bladder. Symptoms develop quickly and include abdominal pain, fever, and generally feeling unwell. You may need admitting to hospital.
- **Jaundice** – this is rare. It occurs if a gallstone comes out of your gallbladder, but gets stuck in your bile duct. Bile then cannot pass into your gut, and so seeps into your bloodstream. This causes you to go yellow (jaundiced). Although the stone may pass naturally into your gut, you will usually need an operation to remove it.

(Note: there are other causes of jaundice apart from gallstones)

- **Pancreatitis** – this is inflammation of your pancreas. Your pancreas makes a fluid rich in enzymes which digest food. Pancreatic fluid travels down your pancreatic duct, which joins with your bile duct just before opening into your duodenum. If a gallstone becomes stuck here it can cause pancreatitis, which is a painful and serious condition.

## **Can a special diet cure gallstones?**

No! Special diets, extra vitamins or potions that claim to 'dissolve' stones cannot cure gallstones.

## **How are gallstones treated?**

The two types of treatment are surgery and endoscopy. Surgery (called cholecystectomy) is the only treatment that can take away the reservoir (gallbladder) of gallstones. If you have bile duct stones, you may need an endoscopy (ERCP) first to clear your bile duct.

## **What is endoscopy?**

Endoscopic Retrograde Cholangio-pancreatography (ERCP) may be necessary if your gallstones have passed from your gallbladder into your bile duct. A flexible telescope, called an endoscope, is passed through your mouth into the upper part of your intestine (duodenum). A special dye is then injected, to show if any gallstones are present in your bile duct. If so, they are usually removed using the endoscope. (There is a 5% risk of pancreatitis following this procedure.) If the stones cannot be removed by ERCP, your bile duct will need to be explored during an operation (cholecystectomy). For more information on ERCP, please ask for a separate leaflet.

## **What is a cholecystectomy?**

This is an operation to remove your gall bladder and gallstones. It is usually carried out using laparoscopic (keyhole) surgery, under general anaesthetic (you will be asleep during the procedure).

With the keyhole technique, four small cuts are made in your abdomen of 1cm or less, instead of one large cut. A thin tube with a light and a small camera on the end (a laparoscope), and surgical instruments are then passed through these incisions.

Air (carbon dioxide) is used to inflate the area around the gall bladder to allow a better view through the camera. The camera sends pictures to a TV screen so that the surgeon can see the gall bladder and surrounding tissues. The gall bladder is removed through one of the incision sites.

The operation takes around 30 – 60 minutes.

It is important to understand that in very rare circumstances keyhole surgery is not always possible. In this case, your operation may need to be converted to an 'open' method (traditional surgery involving a single large cut to access your gall bladder). This is done at the time of your operation, but will be discussed with you when you consent to the procedure.

## **Are there any risks or complications?**

Cholecystectomy is usually a very safe procedure. As with all procedures, there are some possible risks and complications. These include:

- Bleeding – this may occur during or after the operation, as with any surgery.
- Infection – of one of the incision sites or inside the abdomen.
- Deep vein thrombosis (DVT) – clots in your legs may form. Anti-embolic stockings will be used to reduce this risk.
- Chest infection or pulmonary embolism (PE) – early, regular mobilisation will help reduce these risks.
- Retained stone – before or during the operation a stone may move into your bile duct. This may cause no problems and pass naturally into your bowel. If it does not pass, you may need a further procedure to remove it.
- Bile leak – rarely, bile may leak from your liver or bile duct (less than 1% risk), or your bile duct may get damaged (0.03% risk). This may lead to serious complications which could require an ERCP or more surgical procedures.
- Damage to surrounding structures – this is rare.

## **What are the benefits of cholecystectomy?**

The main benefits are relief from your recurring pain and prevention of complications.

Your gall bladder serves no essential function. You will be able to eat and digest your food normally without a gall bladder. Your liver will continue to produce bile in the normal way.

## **How do I prepare for it?**

You will be asked to attend a pre-operative assessment clinic or have a telephone assessment. This allows us to assess your fitness for surgery and make sure that you are fully prepared for your operation. This will include obtaining:

- a health history
- bloods
- a MRSA (Methicillin Resistant Staph-Aureus) swabs, if necessary
- medication history (please bring your medications with you).

We will also arrange any relevant pre-operative investigations. This is also a good time to ask any questions you may have.

## **What if I am overweight?**

If you are overweight, try to reduce your weight steadily, aiming for 0.5-1kg (1-2lbs) per week.

### **Do:**

- eat plenty of fruit and vegetables
- choose foods rich in starch and fibre, such as wholemeal breads, pastas and cereals.

### **Avoid:**

- foods high in fat, such as all fried foods, pastry, cream and chocolate
- sugary drinks and food, such as biscuits, cakes, sweets and sweetened drinks.

If your BMI is greater than 35 you may be asked to keep to a Liver Diet plan for a week before surgery. This information will be sent to you separately. The diet will help to reduce the size of your liver and reduce the risks associated with keyhole surgery.

## **On the day of the procedure**

Make sure that you have a friend or relative who can bring you in to hospital, take you home, and stay with you overnight.

Wear comfortable loose fitting clothing and bring a small overnight bag with dressing gown, slippers, night wear and toiletries (just in case you need to stay overnight).

## **What happens on the day of admission?**

On the day of your operation, you will be admitted to the ward. The surgeon and anaesthetist will visit you to explain the procedure and potential risks, then answer any questions you may have. You will then be asked to sign a consent form.

You will be asked to change into a theatre gown. To reduce the risk of blood clots, we may give you a blood thinning injection and some special stockings to wear.

## **Will I have any pain or discomfort?**

- During your operation, you will be asleep so will feel nothing. Afterwards, you may have some discomfort. We will give you pain killers to keep you comfortable.
- Within 6-12 hours of your operation, you may have some pain in your right shoulder, which may last for the day. This is caused by the gas used to inflate the inside of your abdomen during the operation.
- You may also have some muscle aches or headaches for the first few days.

## **What happens afterwards?**

Following your operation, the effects of anaesthesia will wear off in a few hours, but you may have poor concentration and memory for the first day or so. It is important that you do not make important decisions, sign legal documents, or operate machinery or equipment for at least 24 hours.

You will usually be able to eat and drink on return to the ward as soon as you feel able. It is important to get up and walk around to help get rid of the gas inside your abdomen.



You will go home either the same day or the morning after your operation. However, if you have had open surgery, you will:

- be in hospital for 3-4 days
- take several weeks longer to return to full activity than with keyhole surgery.

## What happens when I go home?

- **Pain** – take over-the-counter medication such as paracetamol or ibuprofen to relieve pain. Make sure you have a supply at home. Take them regularly (4-6 hourly as per the instructions) for the first 48 hours following surgery, then as needed.
- **Mobility** – it is important, once home, to get out of bed and walk around the house. This improves circulation in your legs, reducing the risk of deep vein thrombosis (DVT) and pulmonary embolism. It also helps to get rid of any abdominal gas, keeps your lungs clear from congestion, and assists in preventing constipation. As you recover you will be able to increase your activities.
- **Diet** – following your operation, it is easy to put on weight as you will be able to eat foods that caused discomfort before. Aim for a healthy balanced diet.
- **Wounds** – methods of wound closure vary depending on your consultant. If you have clips they will usually be removed in 24 hours. Sutures (stitches) are usually dissolvable and steri-strips and water-proof dressings can be removed in 5-6 days. Wounds should appear clean, dry and healing. If you are in doubt seek advice from your practice nurse.
- **Hygiene** – you may shower as soon as able but avoid using soap around the wound sites for 2-3 days.

## When can I resume normal activities?

You should be fit enough to return to work and full activity two weeks after your operation, although this will depend on how physically demanding your job is. If you feel you need more time, seek advice from your GP.

You may drive as soon as you are able to drive safely, without any impairment to your reaction time or ability to think clearly. It is always a good idea to check with the DVLA and your insurance provider before driving.

### **Will I need a follow-up appointment?**

Most patients recover quickly and do not need to be seen again. However, an outpatient appointment may be made, if required.

### **What should I look out for?**

You should feel better every day following surgery. However, if you feel worse than the previous day and have any of the following symptoms in the first week:

- sudden, prolonged abdominal pain not improved with medication
- cannot eat or drink and have unexplained nausea and/or vomiting
- have increased abdominal tenderness and bloating (distension)
- or develop an irregular heartbeat, palpitations, a high temperature or sweats,

### **Please contact:**

#### **Upper GI Team**

Paul Rosenfeld – Upper GI Nurse

07785744872

Louise Goldsmith – Upper GI Nurse

07557499244

Monday - Friday – 8am to 4.30pm

#### **Colorectal Team**

- Nurses – Surgical Care Practitioners

Contact via hospital switchboard

01872 250000

Monday – Friday 7.30am to 5.30pm

or your GP, explaining your recent keyhole surgery and your current symptoms.  
Contact your consultant's secretary via the hospital switchboard:

01872 2250000

## **Out of hours**

Contact one of the following:

- Emergency Surgical Ward 01872 253921 or 252060 explaining that you have had keyhole surgery and the problems you are experiencing. They will take your details and the on-call registrar should call you back to discuss your concerns.
- the emergency GP or 111
- for a life threatening emergency, dial 999.

## **Further Information**

If you have any questions or need further information, please contact the Upper GI Nurse or your consultant's secretary.

Information is also available from:

[www.nhschoices.uk](http://www.nhschoices.uk)

Please contact your Consultant's team for further advice.

Please sign here when you have read and understood the information provided and bring this with you to the hospital on the day of your admission.

Signature \_\_\_\_\_

Date \_\_\_\_\_

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

